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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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09/752,134

12/27/2000

Gilbert Neiger

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06/03/2009

INTEL CORPORATION

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MINNEAPOLIS, MN 55402

EXAMINER

PYZOCHA, MICHAEL J

ART UNIT

PAPER NUMBER

2437

MAIL DATE

DELIVERY MODE

06/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 09/752,134 | Applicant(s) NEIGER ET AL. | |
| | Examiner MICHAEL PYZOSHA | Art Unit 2437 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9 and 31-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9 and 31-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 9 and 31-40 are pending.
2. The petition to withdraw a holding of abandonment filed 11/17/2008 with a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/17/2008 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9 and 31-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US 5522075) in view of Flynn, Jr. (US 20020069335).

As per claims 9, 33 and 36, Robinson discloses running guest software in a processor mode that enables the guest software to operate at a privilege level intended by the guest software (Col 14, lines 12-15); identifying an attempt of the guest software to perform an operation restricted by said processor mode (Col 12, lines 50-53); determining that the attempt of the guest software would fail if the guest software was

running outside said processor mode (Col 12, lines 20-60); allowing the guest software to attempt the operation in response to determining that the attempt would fail (Col 12, lines 20-60); and transferring control over the operation to an operating system running within said processor mode in response to the guest software attempting the operation (see column 12 lines 20-60 and column 7 lines 5-42).

Robinson fails to explicitly disclose allowing the guest software to attempt the operation within said processor mode in response to determining that the attempt would fail if the guest software was running outside said processor mode.

However, Flynn, Jr. teaches determining if guest software would fail outside of the virtual machine and having the control program of the virtual machine either return the interrupt back to the virtual machine or handle it outside of the virtual machine (see paragraphs [0009] and [0010]).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the processing of the Flynn Jr. system in the Robinson system.

Motivation to do so would have been to allow the interrupts to be correctly handled by the system (see Flynn Jr. paragraphs [0009] and [0010]).

As per claims 31, 34, 37, and 40, the modified Robinson and Flynn Jr. system discloses determining that the attempt of the guest software would fail includes determining that the guest software is running with insufficient privilege to perform the operation (see Robinson column 12 lines 20-60).

As per claims 32, 35, 38 and 39, the modified Robinson and Flynn Jr. system discloses exiting said processor mode to transfer control over the operation to a virtual

machine monitor running outside said processor mode in response to determining an attempt would succeed (see Robinson column 12 lines 20-60 and Flynn Jr. paragraphs [0009] and [0010]).

Response to Arguments

5. Applicant's arguments with respect to claims 9 and 31-40 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Traut, Bugnion, Devine, Radko, Karger and Kimura teach methods of virtual machine privilege handling.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PYZOSHA whose telephone number is (571)272-3875. The examiner can normally be reached on Monday-Thursday, 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Pyzocha/
Examiner, Art Unit 2437